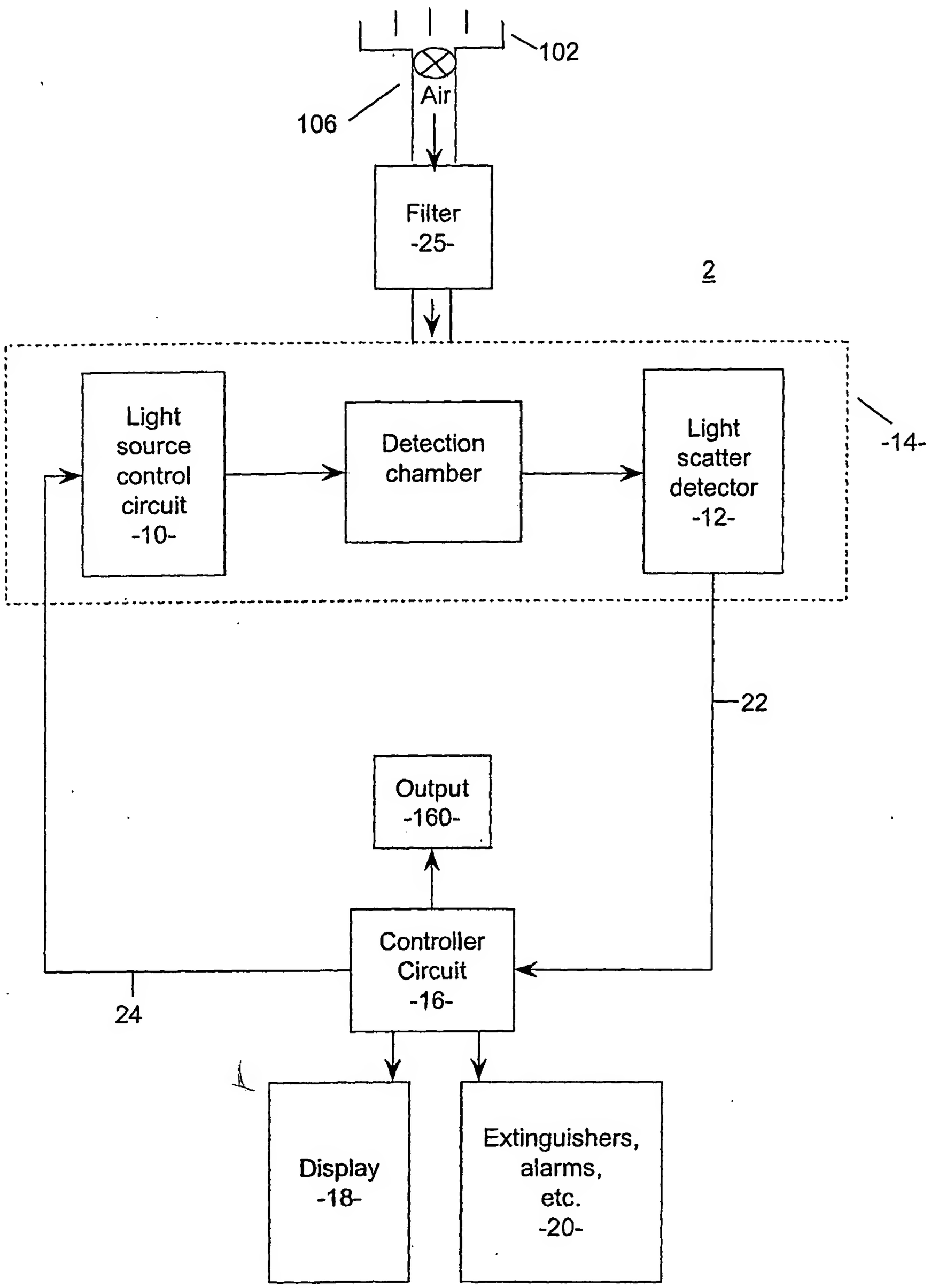
102
Air
106
Filter
-25-
2
Light
source
control
circuit
-10-
Detection
chamber
Light
scatter
detector
-12-
-14-
22
Output
-160-
Controller
Circuit
-16-
24
Display
-18-
Extinguishers,
alarms,
etc.
-20-

FIG 1

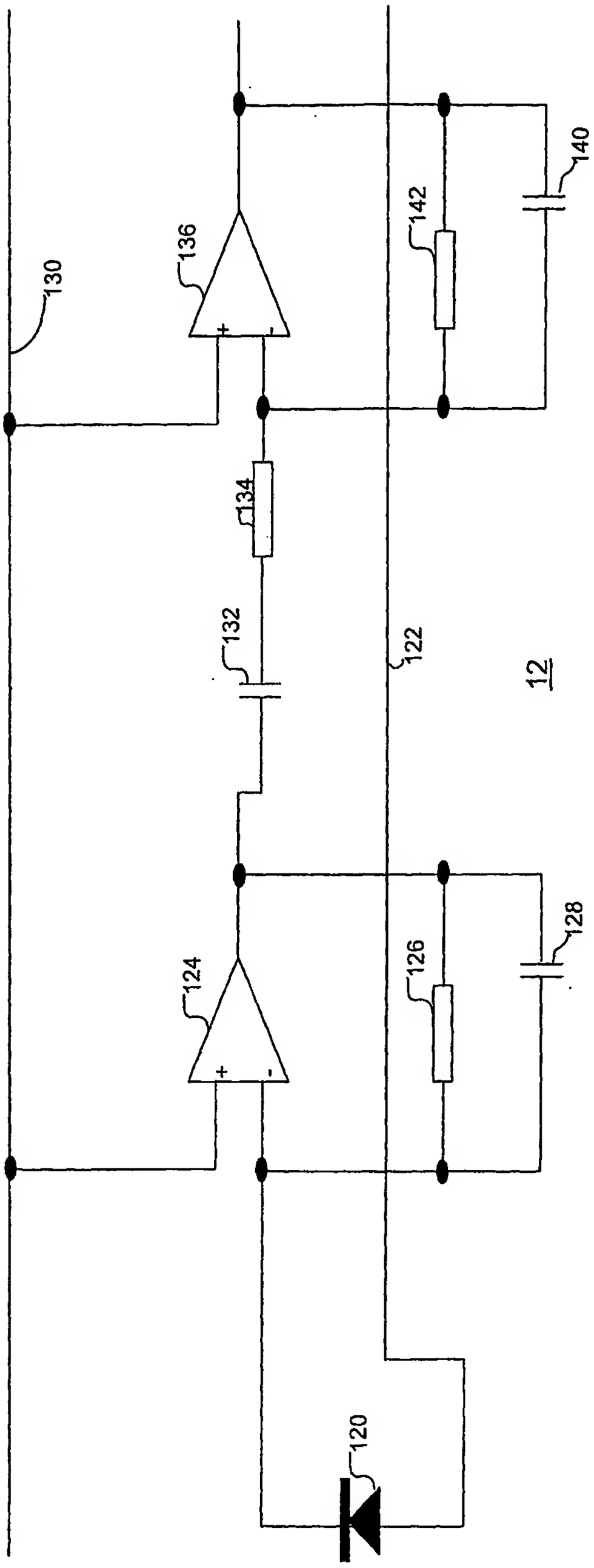

FIG 2

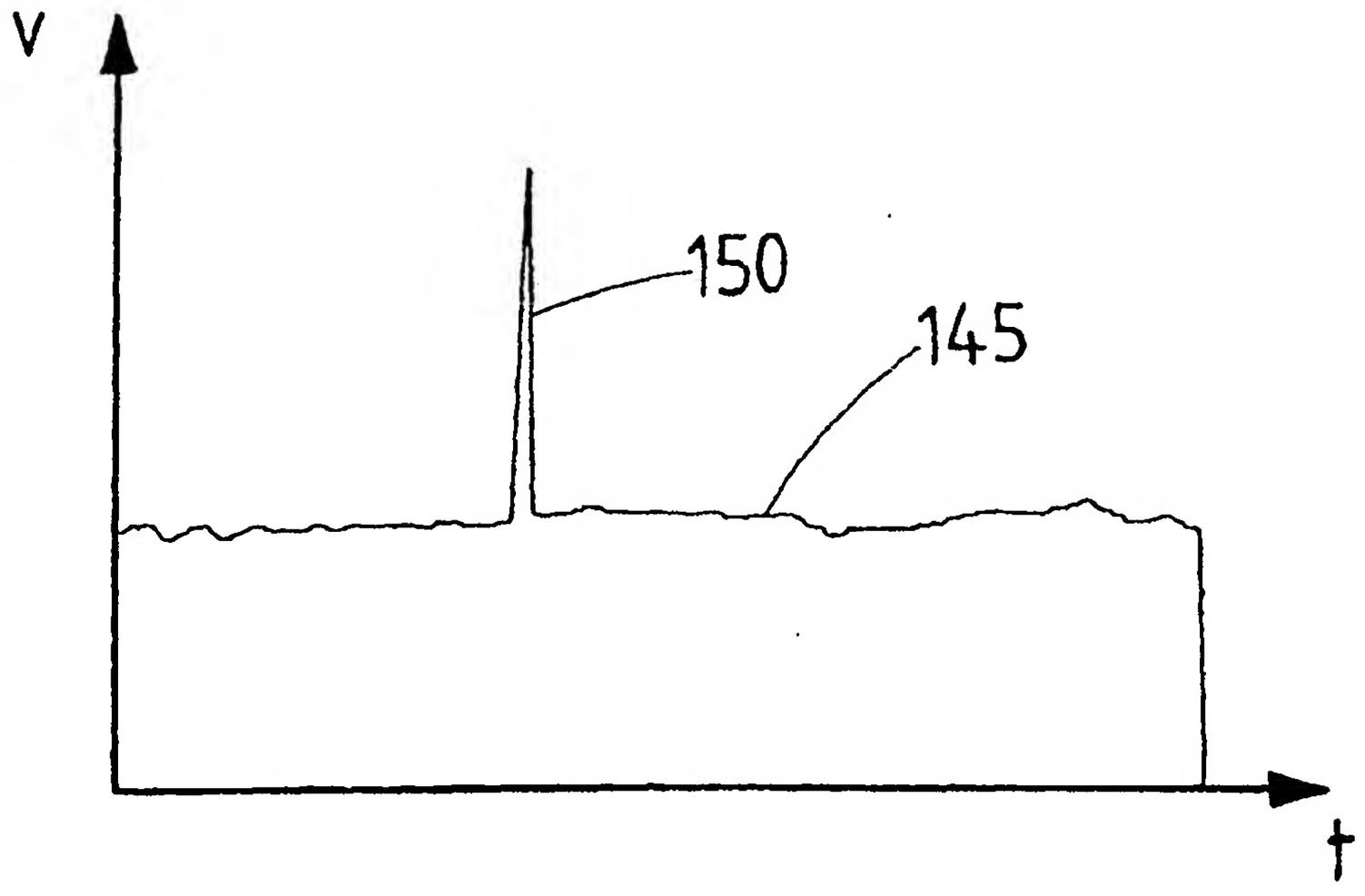

FIG 3

Patent provided by Sughrue Mion, PLLC - http://www.sughrue.com

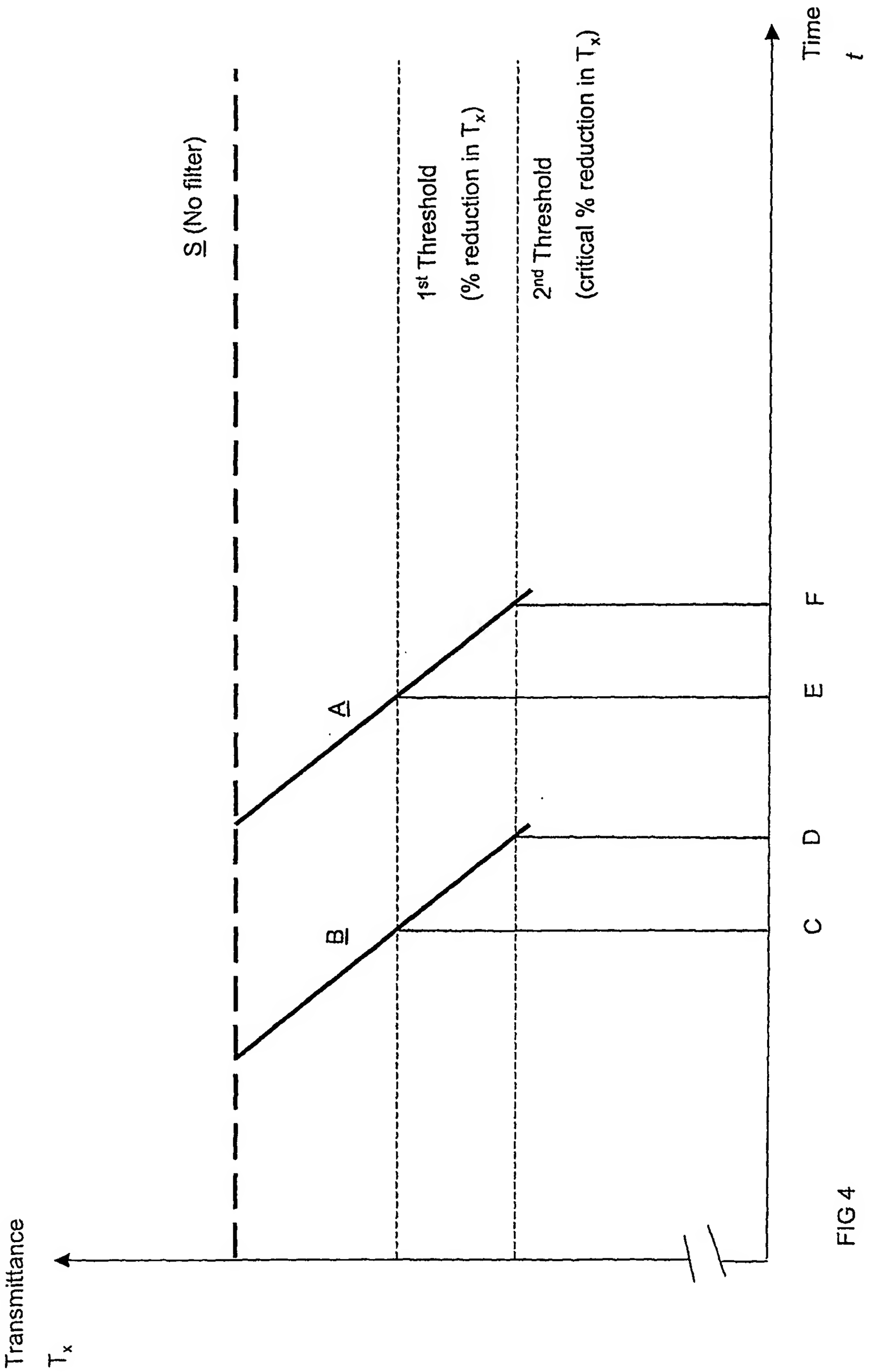
Transmittance
T_x
S (No filter)
1st Threshold
(% reduction in T_x)
2nd Threshold
(critical % reduction in T_x)
Time
t
A
B
C
D
E
F

FIG 4

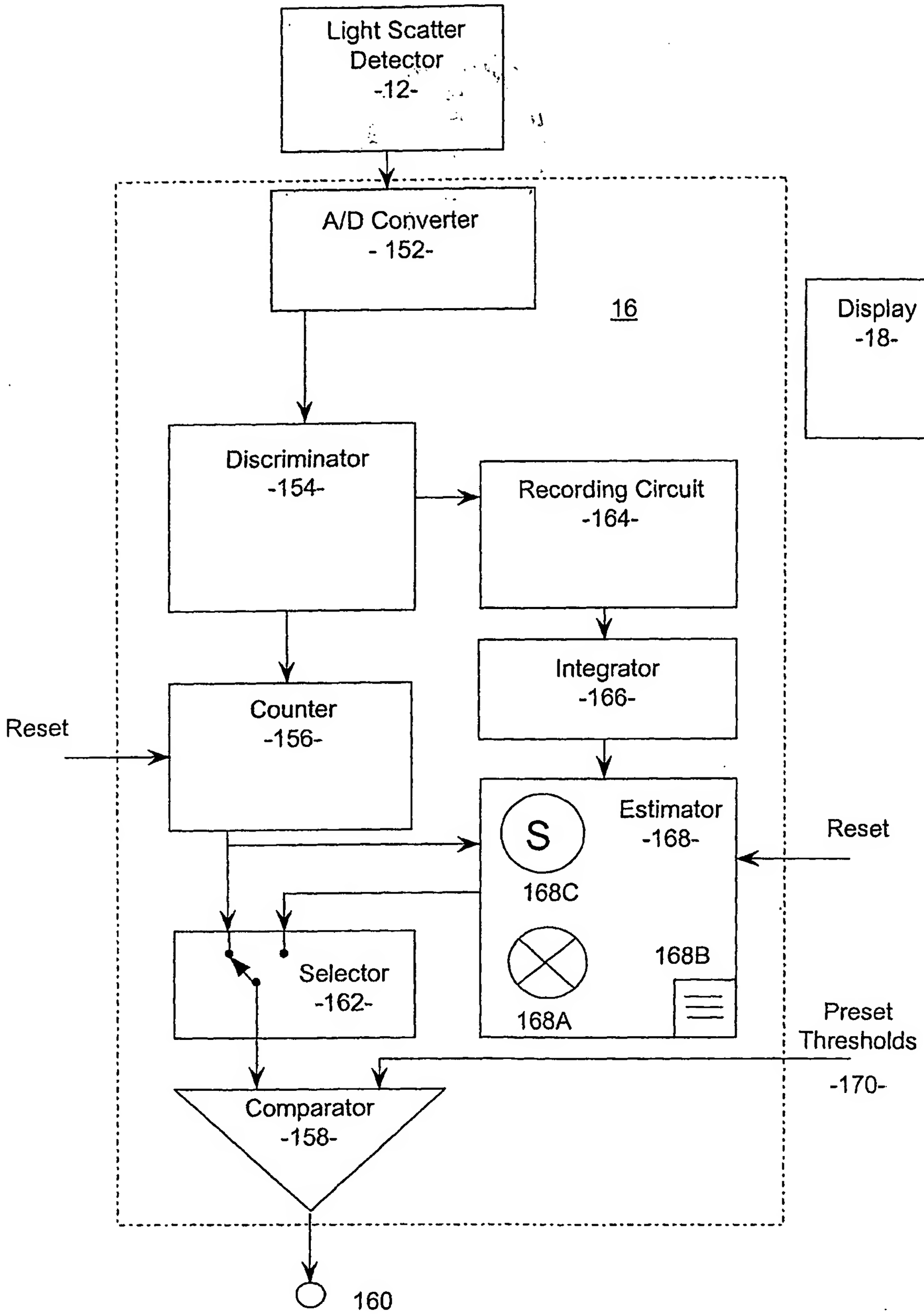
Light Scatter Detector -12-
A/D Converter - 152-
16
Display -18-
Discriminator -154-
Recording Circuit -164-
Integrator -166-
Reset
Counter -156-
S
Estimator -168-
Reset
168C
168B
168A
Selector -162-
Preset Thresholds -170-
Comparator -158-
160

FIG 5